



Troubleshooting Pool Problems

Cloudy Water: May be caused by high pH and high total alkalinity. If pH is above 7.6, it should be adjusted to 7.2 to 7.6. Inadequate filtration, the introduction of foreign matter or algae formation may also contribute to pool cloudiness. Try backwashing the filter or replacing filter media with fresh filter media. Be certain that filtration is adequate.

Eye Irritation: Results from too little free available chlorine and too much combined chlorine (chloramines). Superchlorinate to eliminate combined chlorine and convert all chlorine to free available chlorine. In rare cases, eye irritation may be caused by excessive free available chlorine, or by high or low pH. Bathers should not use the pool if free available chlorine is greater than 10.0 PPM or pH is out of the 7.2 to 8.0 range.

Unpleasant Odors: Also caused by excessive combined chlorine (chloramines). Superchlorinate to eliminate combined chlorine and convert all chlorine to free available chlorine.

High pH: Add sodium bisulfate or muriatic acid until pH is 7.2 to 8.0. See pH information sheet.

Low pH: Add sodium carbonate or soda ash until pH is 7.2 to 8.0. See pH information sheet.

Scale & Stain: May develop in new in-ground pools as a result of hydroxides and carbonates from the fresh plaster dissolving in the pool water. This causes pH to rise and scale to form. Dirt, algae or iron trapped in the scale will also cause stains. In plaster pools having unbalanced water will result in stains. Water in new pools should be kept in balance from the start and pH should never be above 7.6. High pH combined with high total alkalinity and high calcium hardness will also cause scale and stain. Total alkalinity and pH must always remain in the recommended ranges (see appropriate information sheets). Try using a commercial stain and scale-controlling product.

Low Total Alkalinity: Indicated by water that fluctuates in pH with the addition of small amounts of acid or alkali, and is therefore difficult to maintain at a fixed pH. Pool water should be maintained with total alkalinity between 80 to 125 PPM. If calcium hardness is over 500 PPM then total alkalinity may be maintained at 60 to 80 PPM. Addition of 1.5 lb Sodium bicarbonate per 10,000 gallons will raise total alkalinity by 10 PPM. Soda ash may raise total alkalinity, but will also raise pH significantly. In pools where total alkalinity is too low but pH is high, raise the total alkalinity before lowering the pH. Do not swim in the pool until an adequate pH is established.

High Total Alkalinity: Indicated by ineffectiveness of acid or base to change pool pH. Use acid in one or more area of the pool for massive total alkalinity and pH reduction. Do not swim in pool until an adequate pH level is established.

Foaming: May be caused by presence of a quaternary compound added as an algaecide. Try using a commercial non-foaming algaecide product or a defoamer.

Algae: Three types of algae common to swimming pools are green algae, yellow algae, and black algae. To remove algae, first adjust the pH to 7.2 to 7.4. Once pH is adjusted, superchlorinate the pool. Finally, brush the sides and bottom of your pool. Use a steel brush in concrete pools, a softer brush in vinyl pools. Control algae formation with an algaecide. Sometimes it may be necessary to drain the pool and scrub the sides and bottom of the pool to remove more resistant algae.

Green Water: May be caused by algae (see above) or iron or copper in the water (see below). Additionally, green water may be caused by corrosion of metal pool fixtures by unbalanced water. Adjust pH and calcium hardness if necessary.

Corrosion of Fixtures and Copper Pipe: (See above). Additionally, trichloroisocyanuric acid is highly acidic. Total alkalinity should be 80 to 125 PPM, adjust if necessary. Excessive water velocity may also cause pipe erosion and lead to green water. Recommended maximum water velocity in copper pipe is 7 to 8 feet per second.